AMENDMENTS TO THE CLAIMS:

Kindly amend claim 23, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application.

Claim 1 (withdrawn): Method for the measuring of the density of blood cells in blood characterized in the directing of a light beam into the space that is to be investigated and that one or several sensors are so arranged that its or their sense sectors do not intersect the beam of the light source in the volume.

Claim 2 (withdrawn): Method according to claim 1, characterized in that two sensors are used that are opposed to each other.

Claim 3 (withdrawn): Method according to claim 1, characterized in that light beam and sensor sector(s) are perpendicular to each other.

Claim 4 (withdrawn): Sensor device for the measuring of the density of blood cells in blood characterized in comprising vessel or tubing, a light beam emitter facing the tubing, and one or several sensor(s) also facing the vessel and so arranged that its or their sense sectors do not intersect the beam of the light source in the vessel or tubing.

Claim 5 (withdrawn): Sensor device according to claim 4, characterized in that the locations of the light source and sensor(s) respectively are separated lengthwise of the vessel or tubing.

Claim 6 (withdrawn): Sensor device according to claim 4, characterized in that two sensors are arranged with their sensing directions perpendicular to the light beam.

Claim 7 (original): An optical probe arrangement that surrounds blood in a receptacle, said optical probe arrangement comprising at least two sets of light emitters and light detectors, each set comprising one light emitter and at least one detector, each set arranged to transilluminate the

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blood at a preferred angle between said light emitter and said light detector – or detectors – of each set, where said angle is at least sufficient to avert direct light from said light emitter to said light detector, for the detection of blood constituents.

Claim 8 (original): An optical probe arrangement according to claim 7, comprising four sets of light emitters and two or three light detectors in each set, wherein a light detector may represent a detector incorporated in an adjacent set.

Claim 9 (previously presented): An optical probe arrangement according to claim 7, wherein the light emitters are arranged as an array to encircle an elongated receptacle at longitudinally one location around said receptacle's circumference, and the light detector are arranged to encircle the receptacle at a different circumferential location.

Claim 10 (previously presented): An optical probe arrangement according to claim 7, wherein a second array of light detectors are longitudinally located at a third location around said receptacle's circumference, and the light detector are arranged to encircle the receptacle at that circumferential location.

Claim 11 (withdrawn): A method for processing signals from sensor devices as claimed in claim 4, including an amplifier for amplifying signals from the sensor devices, which comprises employing a signal processing algorithm on the signals from said sensor devices, to detect blood constituents.

Claim 12 (withdrawn): A method for processing signals from light detectors as claimed in claim 11, which comprises employing a signal processing algorithm on the signals from said light detectors, to detect hematocrit.

Claim 13 (withdrawn): A method according to claim 12, which comprises employing a multi variable analysis of signals from all light detectors engaged in the signaling process.

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Claim 14 (withdrawn): A sensor device as claimed in claim 4, wherein a third array of light sensors are longitudinally located at a fourth location around a receptacle's circumference, and the light sensors are arranged to encircle the receptacle at that circumferential location and an second array of light beam emitters longitudinally located at a fifth location around said receptacle's circumference, and the light sensors are arranged to encircle the receptacle at that circumferential location.

Claim 15 (withdrawn): A method for processing signals from light sensors as claimed in claim 14, including an amplifier for amplifying signals from the light sensors, which comprises employing a signal processing algorithm on the signals from said light sensors, to detect blood constituents.

Claim 16 (withdrawn): A method for processing signals as claimed in claim 15, which comprises employing a signal processing algorithm on the signals from said light detectors, to detect hematocrit.

Claim 17 (withdrawn): A method for processing signals from sensor devices as claimed in claim 4, including an amplifier for amplifying signals from the sensor devices, which comprises employing a signal processing algorithm on the signals from said sensor devices, to detect oxygen saturation in blood.

Claim 18 (withdrawn): A method according to claim 11, wherein signals are processed in the time domain.

Claim 19 (withdrawn): A sensor device according to claim 1, further comprising a system to calculate hematocrit values from blood, and presenting the data to a display, and/or transferring data to another application.

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Claim 20 (withdrawn): A sensor device as claimed in claim 4, further comprising a system to calculate hematocrit values and oxygen saturation values from blood, and presenting the data to a display, and/or transferring data to another application.

Claim 21 (withdrawn): Method for the measuring of the density of blood cells in blood, characterized in the directing of a light beam into the space that is to be investigated and that two sensors, are used that are opposed to each other.

Claim 22 (withdrawn): Method according to claim 21, characterized in that light beam and sensor "beams(s)" are perpendicular to each other.

Claim 23 (currently amended): A sensor device as claimed in claim [[4]]7, characterized in that the measuring takes place in a tubing that is clamped in a holder with V-shaped recesses so that tube is given a square cross section and that light emitters and sensors are arranged at the flat surfaces.

Claim 24 (previously presented): A method for processing signals from light detectors as claimed in claim 7, including an amplifier for amplifying signals from the light detectors, which comprises employing a signal processing algorithm on the signals from said light detectors, to detect blood constituents.

Claim 25 (previously presented): A method for processing signals from light detectors as claimed in claim 24, which comprises employing a signal processing algorithm on the signals from said light detectors, to detect hematocrit.

Claim 26 (previously presented): A method according to claim 25, which comprises employing a multi variable analysis of signals from all light detectors engaged in the signaling process.

Claim 27 (previously presented): An optical probe arrangement as claimed in claim 7, wherein a third array of light detectors are longitudinally located at a fourth location around a receptacle's

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circumference, and the light detectors are arranged to encircle the receptacle at that circumferential location and an second array of light emitters longitudinally located at a fifth location around said receptacle's circumference, and the light detectors are arranged to encircle the receptacle at that circumferential location.

Claim 28 (previously presented): A method for processing signals from light detectors as claimed in claim 27, including an amplifier for amplifying signals from the light detectors, and which comprises employing a signal processing algorithm on the signals from said light detectors, to detect blood constituents.

Claim 29 (withdrawn): A method for processing signals as claimed in claim 15, which comprises employing a signal processing algorithm on the signals from said light detectors, to detect hematocrit.

Claim 30 (previously presented): A method for processing signals from light detectors as claimed in claim 7, including an amplifier for amplifying signals from the light detectors, which comprises employing a signal processing algorithm on the signals from said light detectors, to detect oxygen saturation in blood.

Claim 31 (withdrawn): A method according to claim 15, wherein signals are processed in the time domain.

Claim 32 (withdrawn): A method according to claim 17, wherein signals are processed in the time domain.

Claim 33 (previously presented): A method according to claim 24, wherein signals are processed in the time domain.

Claim 34 (previously presented): A method according to claim 28, wherein signals are processed in the time domain.

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Claim 35 (previously presented): A method according to claim 30, wherein signals are processed in the time domain.

Claim 36 (previously presented): An optical probe as claimed in claim 7, further comprising a system to calculate hematocrit values from blood, and presenting the data to a display, and/or transferring data to another application.

Claim 37 (previously presented): An optical probe as claimed in claim 7, further comprising a system to calculate hematocrit values and oxygen saturation values from blood, and presenting the data to a display, and/or transferring data to another application.

Claim 38 (previously presented): An optical probe as claimed in claim 7, characterized in that the measuring takes place in a tubing that is clamped in a holder with V-shaped recesses so that tube is given a square cross section and that light emitters and sensors are arranged at the flat surfaces.

Claim 39 (previously presented): An optical probe as claimed in claim 36, characterized in that the measuring takes place in a tubing that is clamped in a holder with V-shaped recesses so that tube is given a square cross section and that light sources and sensors are arranged at the flat surfaces.

Claim 40 (previously presented): An optical probe as claimed in claim 37, characterized in that the measuring takes place in a tubing that is clamped in a holder with V-shaped recesses so that tube is given a square cross section and that light sources and sensors are arranged at the flat surfaces.

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